

6 to 24; South Atlantic States, 5 to 15; Gulf States, 6 to 16; Ohio-valley and Tennessee, 8 to 25; Upper Lake region, 10 to 24; Northwest, 5 to 21.

Droughts.—At the close of the month, at South Hartford, N. Y., wells and fountains low. At Woodstock, Vt., drought very severe. At West Charlotte, Vt., many wells and springs dry; water in Lake Champlain very low. At Westminster, Vt., continues very dry.

RELATIVE HUMIDITY.

The mean relative humidity for the month, as reported from the Signal Service stations, ranges in New England from 72 to 79 per cent.; Middle Atlantic States, 68 to 82; South Atlantic States, 64 to 78; Gulf States, 64 to 76; Indian Territory, Arkansas and Tennessee, 58 to 71; Lower Lake region, 73 to 79; Upper Lake region, 72 to 85; Ohio and upper Mississippi valleys, 65 to 76; Missouri valley, 61 to 77; Minnesota, 72 to 82; Cheyenne, 49; Denver, 46; Santa Fe, 56; Salt Lake City, 54; Virginia City, 60; San Diego, 61; San Francisco, 69; Pike's Peak, 74; Mt. Washington, 84.

WINDS.

The prevailing winds for the month are shown by the arrows on chart No. II. They have very generally been from the NW., except in Florida. The prevailing winds that were from exceptional directions were, S., at Chicago, Denver, Erie, Knoxville, La Crosse and St. Marks; SE., at Grand Haven and Oswego; SW. at Toledo, Cleveland, Morgantown and Jacksonville. The prevailing winds were NW. on Mt. Washington, and W. on Pike's Peak.

Total movements of the air.—The following are the largest total movements of the air during the month as recorded at the Signal Service stations: Pike's Peak, 16,443; Sandy Hook, 12,242; Cape May, 11,887; Cape Lookout, 11,308; Kittyhawk, 11,183; Barnegat, 10,655; Thatcher's Island, 10,552; Indianola, 10,199. Smallest movements: Lynchburg, 2,069 miles; San Diego, 2,229; Augusta, 2,584; Salt Lake City, 2,887; Barnegat, 2,991.

Highest Winds.—Among the highest wind-velocities reported from the Signal Service stations during the month, are the following: Mt. Washington, 28th, NW. 108 miles per hour; Pike's Peak, 30th, 83; Sandy Hook and Barnegat, 20th, NE. 68; Kittyhawk, 4th, NE. 55; New York and Boston, 20th, NE. 50; Malone, 50.

VERIFICATIONS.

Probabilities.—The detailed comparison of the tri-daily weather Probabilities, with the telegraphic reports for the succeeding twenty-four hours, shows a percentage of verifications of 83.9, and a percentage of omissions of 0.6. In detail the verifications have been as follows: for weather, 88.4; wind, 85.7; temperature, 82.6; barometer, 78.9. The geographical distribution of the verifications have been—New England, 82.5; Middle States, 82.0; South Atlantic States, 83.7; East Gulf States, 82.2; West Gulf States, 83.4; Lower Lakes, 82.9; Upper Lakes, 86.6; Tennessee and Ohio valley, 84.4; Upper Mississippi valley, 86.7; Lower Missouri valley, 84.3.

Cautionary Signals.—There have been displayed 211 cautionary storm-signals at United States stations: of these 155 were verified at the stations and 49 others, or 73 per cent. in all, verified within one hundred miles of the station; 50 were not justified and 6 were displayed too late; 38 cases are reported in which signals were needed, but not displayed, in 7 of which cases orders had been issued, but failed to be received, owing to derangement of telegraph lines.

NAVIGATION.

The highest and lowest readings on the Signal Service river-gauges are given in table on Chart No. III, from which it appears that the Missouri was highest during the first three days of the month and lowest during the last three. The Mississippi was generally lowest on the 1st and 30th, and highest from the 10th to 20th. The Ohio and tributaries were swelled for a short time by a flood, which reached its height between the 2nd and 28th. At Shelburn, N. H., on the 1st, Androscoggin river was lower than ever before known. Wappinger's Falls, N. Y., during the first of month water in lake so low that factories could not run.

Ice in Rivers is reported as follows: On the 6th, at Breckenridge, Red River of the North full of floating ice and closed on the 7th. 30th, at Buffalo, ice two inch thick. 28th, 29th and 30th, at Davenport and Keokuk, floating ice. At La Crosse, 24th to 29th, floating ice, when all boats were withdrawn; frozen over 30th. Omaha, 14th, floating; 18th, river gorged; 24th, river closed. Pembina, 9th, navigation closed on the Red River of the North; 14th, ice thick enough to sustain teams—Moorhead, Minn., Red River of the North, crossed by teams 4 h. St. Paul, 14th to 23rd, floating ice; 19th, navigation closed; 30th, river frozen over. Yankton, 14th, river closed by ice. Fort Sully, 8th to 21st, floating ice; 22nd, river closed. Firesteel, Dak., 13th, James River frozen. Hennipin, Ill., 28th, Illinois River closed. Rockford, Ill., 29th, Rock River closed. Muscatin, Iowa, 22nd to 30th, floating ice; 30th, ferry-boat ceased running.